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AN ASSESSMENT OF THE IMPACT OF THE JOHN B. HYNES VETERANS MEMORIAL CONVENTION CENTER ON THE ECONOMY OF THE COMMONWEALTH OF MASSACHUSETTS IN 1989

March 1990

Bell Associates Inc.
Cambridge, Massachusetts

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TABLE OF CONTENTS

1.0 **Background**

The new John B. Hynes Veterans Memorial Convention Center (the Hynes) was transformed from an auditorium facility to a full-fledged convention center on January 21, 1988. During 1989, the Hynes succeeded in attracting 302,063 visitors (179,701 in quarters one and two and 122,362 in quarters three and four) to conventions without exhibits, conventions with exhibits, trade shows, convention-like events and meetings where participants booked hotel rooms. The total economic impact generated by the Hynes in 1989 was $607,770,031. Approximately $42,405,322 in total tax revenue was produced.

This represents a 4% increase in economic impact to the Commonwealth of Massachusetts over calendar 1988. This is due primarily to the increase in the average price of a hotel room to delegates and the increase in the IACVB average length of stay of delegates. This report summarizes the methodology and findings of Bell Associates Inc. (BAI) of Cambridge, Massachusetts, in its effort to assess the economic impact of the John B. Hynes Veterans Memorial Convention Center on the Commonwealth of Massachusetts during calendar year 1989.

2.0 **Approach**

The approach adopted consisted of estimations based upon available data from 1988, 1989, industry models and a well respected multiplier to gauge secondary or indirect as well as direct economic impacts of the Hynes. In order to develop a workable model to describe the impact of the Hynes, the following components were examined:

1. the average cost of a room for the Boston convention delegate;

2. the average number of nights a Boston convention delegate will stay in Boston to visit the Hynes;

3. the proportional relationship between the cost of a hotel room to a delegate and the other delegate expenditures;

4. the percentage of state and local tax applied to various types of delegate expenditures;

5. the extent to which the Hynes delegate dollars spent directly and indirectly stimulates economic impact; and

6. the number of visitors to Hynes convention-type events.

The approach to determining numerical values for each of the six components listed are presented below.

Average Hotel Room Cost

The average hotel room cost was determined by a survey of meeting planners who had convened groups in the Hynes during 1989. A total of 32 meeting planners (11 in the first half of 1989 and 21 in the second half of 1989) were able to provide the following information:

- o the hotel(s) in which they booked rooms;
- o the number of rooms booked per hotel; and
- o the cost of the rooms booked at each hotel.

The number of rooms booked at each hotel was multiplied by the cost per single room at that hotel. Low end single room prices were used intentionally to provide a conservative estimate. The sum costs per hotel price category were totaled and the product was divided by the total number of reported booked rooms across all categories. The resultant average price for the first half of 1989 per convention delegate hotel room was $118.31. The resultant average price for the second half of 1989 per convention delegates hotel room was $124.78.

These estimates were based on surveys (including price information) for 15,018 booked rooms during the first half of calendar 1989 and 15,412 rooms booked in the second half.

Results of data collection from each half of 1989 have been summed to provide the overall year-end findings of this report. It is a slight increase in room rate from the first half to the second half of 1989 and summation here is more accurate than an overall averaging for the entire year.

Average Duration of Delegate Visit

In the absence of survey data from Boston delegates for 1989 on this subject, this assessment used the average of 4.1 delegate-nights per visitor established by the International Association of Convention and Visitor's Bureaus (IACVB).

Proportional Delegate Expenditures

The IACVB served as a reference for this dimension of the study as well. The proportional relationship (provided by the IACVB) between delegate spending on hotels and other spending during 1989 is presented on the following page and was adopted for this assessment.

U.S. 1988 DELEGATE EXPENDITURES (Source: IACVB)

1988 DATA	TYPE OF %-age	EXPENDITURE
$264.56	51.0%	Hotel Room and Incidentals
$56.87	11.0%	Hotel Restaurants
$59.08	11.4%	Other Restaurants
$26.86	5.2%	Hospitality Suites
$25.95	5.0%	Entertainment
$42.44	8.2%	Retail Stores
$22.39	4.3%	Local Transportation
$20.50	4.0%	Other
$518.65	100.0%	TOTAL

State and Local Taxes Applied to Expenditures

There are five specific taxes that apply to delegate expenditures directly.

- o State Hotel/Motel tax of 5.7%;
- o Local Hotel/Motel tax of 4%;
- o State Meals tax of 5%; and
- o State Sales Tax of 5%

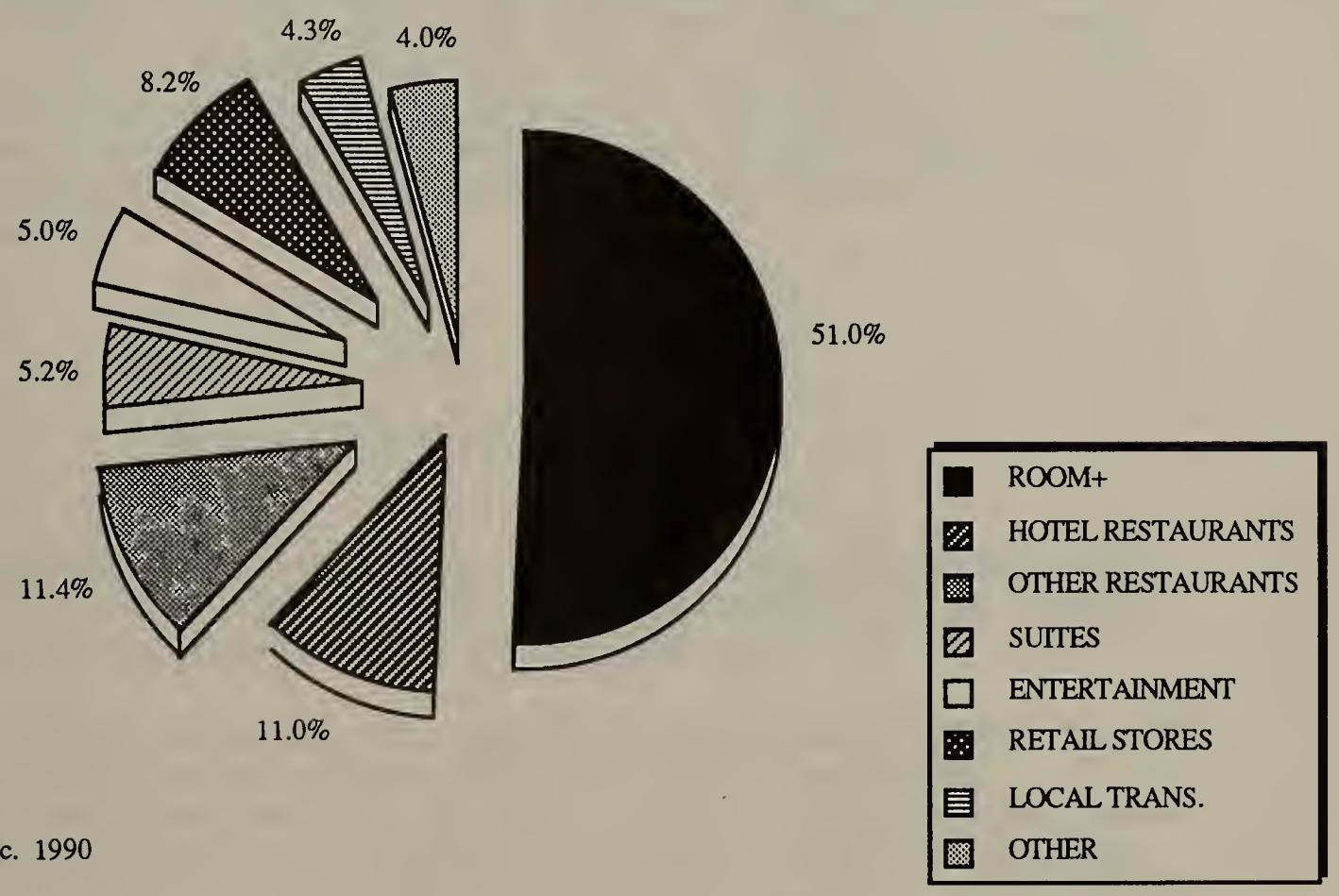
For the purposes of this assessment, tax on local transportation (i.e. gasoline and sales tax, on taxicabs and rental cars) has been omitted.

Indirect Expenditures

In addition to direct impacts of visitor spending on hotels, food, etc., there are other, more indirect impacts of those dollars spent as they "turn over" in the economy several times. Demand reflected in the spending of direct dollars stimulate other second round suppliers of labor, products and services to satisfy that demand. Additionally, as employees related to this first tier dynamic are paid, they purchase goods which, in turn, serve to support additional labor, consumption and taxes, until the dollars ultimately "leak out" of the state. This phenomenon is often quantitatively calculated by economists and synthesized into a single value or "multiplier."

The multiplier used for this assessment is 2.07. It was developed by the U.S. Department of Commerce, Bureau of Economic Analysis in 1985. It is called the Regional Input-Output Modeling System (RIMSII). One can estimate then, based

PERCENTAGE OF TYPES OF DELEGATE EXPENDITURES



Bell Associates Inc. 1990
Source: IACVB

on this multiplier, that for every dollar spent, an additional impact of $1.07 is generated. The total impact then, of the original $1.00 is $2.07.

Rate of Increase In Hotel Room Prices

Previous attempts by this research team to determine the rate of increase in Hotel room prices included a survey of eighteen Boston area hotels located within a $10 taxi ride of the Hynes. The survey asked respondents (hotel sales office managers or representatives) for the highest rate for a single non-group, pre-tax room and the lowest rate for 1988, and for January, June, July and December, 1989. The lowest rate in each year was included in the calculations. The percentage increase between 1988 and January, 1989 was .0858. This increase was assumed in the March, 1989 Bell Associates Inc. Economic Impact Analysis Report for 1989 to 1990. The resultant average single hotel room rates previously estimated were:

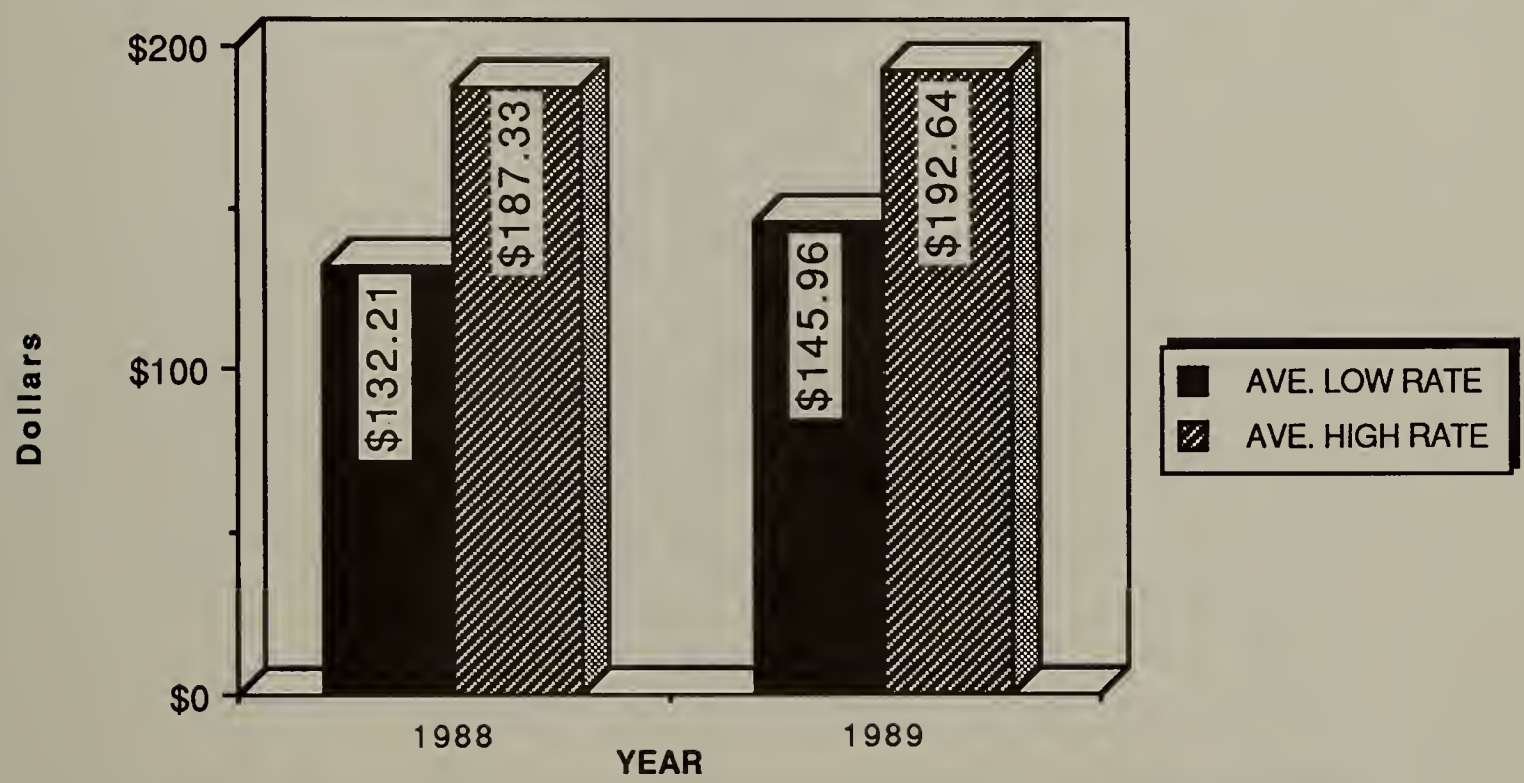
1988	1989	1990
$132.21	$143.55	$155.85

The methodology was replicated for this report for the first half and second half of 1989. The survey of the same 18 hotels originally produced an average low-end, single room rate of $151.07 for June, 1989.

A major refinement, however, was made to the questionnaire between the first (first half of 1989) and second phase of administration. Specifically, respondents were first asked what the price of the low-end single hotel room was on the date in question and then asked, "How many rooms were generally available at that price?" Additionally, four more hotels provided information for the July - December time period. Three of the hotels are located within close proximity to the Hynes (Marriott Copley, Copley Plaza, Westin and the Marriott Long Wharf). The complete list of hotels included in this survey appears on the following page.

The combination of these two refinements provided a more complete and accurate representation of price and availability for the relevant room-types. The new number of (available) rooms at the two price levels was inserted into the January - June estimation as well, slightly modifying the results for this dimension of the analysis as previously submitted. The new price for January - June is $145.36 and for July - December, 1989 is $146.30. The overall average for 1989, however, is $145.96. This represents a percentage increase over 1988 of .1040 and is much closer to the original projection ($143.55) calculated in the report of March, 1989.

THE AVERAGE LOW AND HIGH RATE FOR NON-GROUP SINGLE HOTEL ROOM



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BOSTON AREA HOTELS INCLUDED IN THE SURVEY

SHERATON BOSTON
ROYAL SONESTA
MARRIOTT CAMBRIDGE
LENOX HOTEL
MIDTOWN
OMNI PARKER
HOTEL MERIDIAN
LAFAYETTE
HYATT CAMBRIDGE
HOWARD JOHNSON
HILTON E.BOSTON
HOLIDAY INN
BOSTON HARBOR
ELIOT
COPLEY SQUARE
FOUR SEASONS
BOSTON PARK PLAZA
BACK BAY HILTON
MARRIOTT COPLEY
MARRIOTT LONG WHARF
COPLEY PLAZA
WESTIN

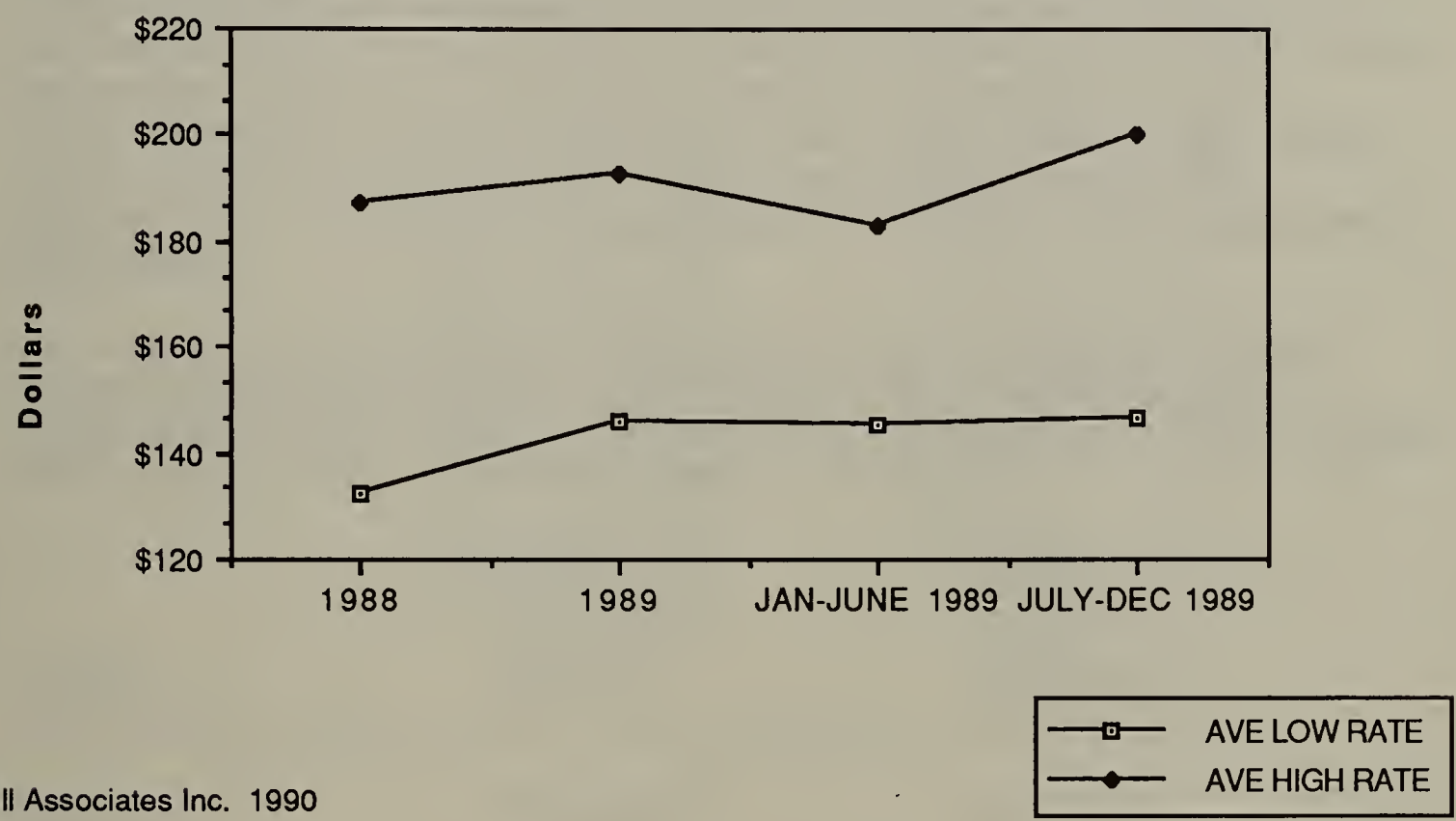
The actual rate of increase between the price of a single room for delegates during 1988 and the end of the first half of 1989 ($118.31/$108.64 = .0890), is close to the rate (.0858) previously estimated for the "rack rate" increase for 1988-1989. For the second half of 1989, however, the rate of increase was more dramatic ($124.78/108.64 = .1486). The high end single room rates from 1988 to the first half of 1989 actually represents a percentage decrease of .0225 ($187.33/183.20).

It will be interesting, in subsequent analyses, to continue to track whether the rate of increase in low end delegate room prices lags behind or may actually precede "rack rate" increases and, if so, by how long an interval and to what degree. Such a relationship may occur because delegate room rates are negotiated some time in advance. On the other hand, "rack rate" increases may reflect a shrinking supply of non-delegate rooms based upon a greater demand from conventions. The converse may also prove to be true.

The Number of Hynes Visitors

The number of visitors to each convention with exhibits, conventions without exhibits, trade shows and other convention-like events were included in this

THE AVERAGE LOW AND HIGH RATE FOR NON-GROUP SINGLE HOTEL ROOM



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analysis. Other types of events, such as walk-in public expositions or "gate shows" were generally omitted except for the inclusion of exhibitors likely to "stay over" in hotels. Attendance at the included events for 1988 was 348,187. The actual attendance for 1989 was 302,063. Actual revenues, however, as previously stated herein, did surpass the revenue generated in 1988.

3.0 Economic Impact - 1989

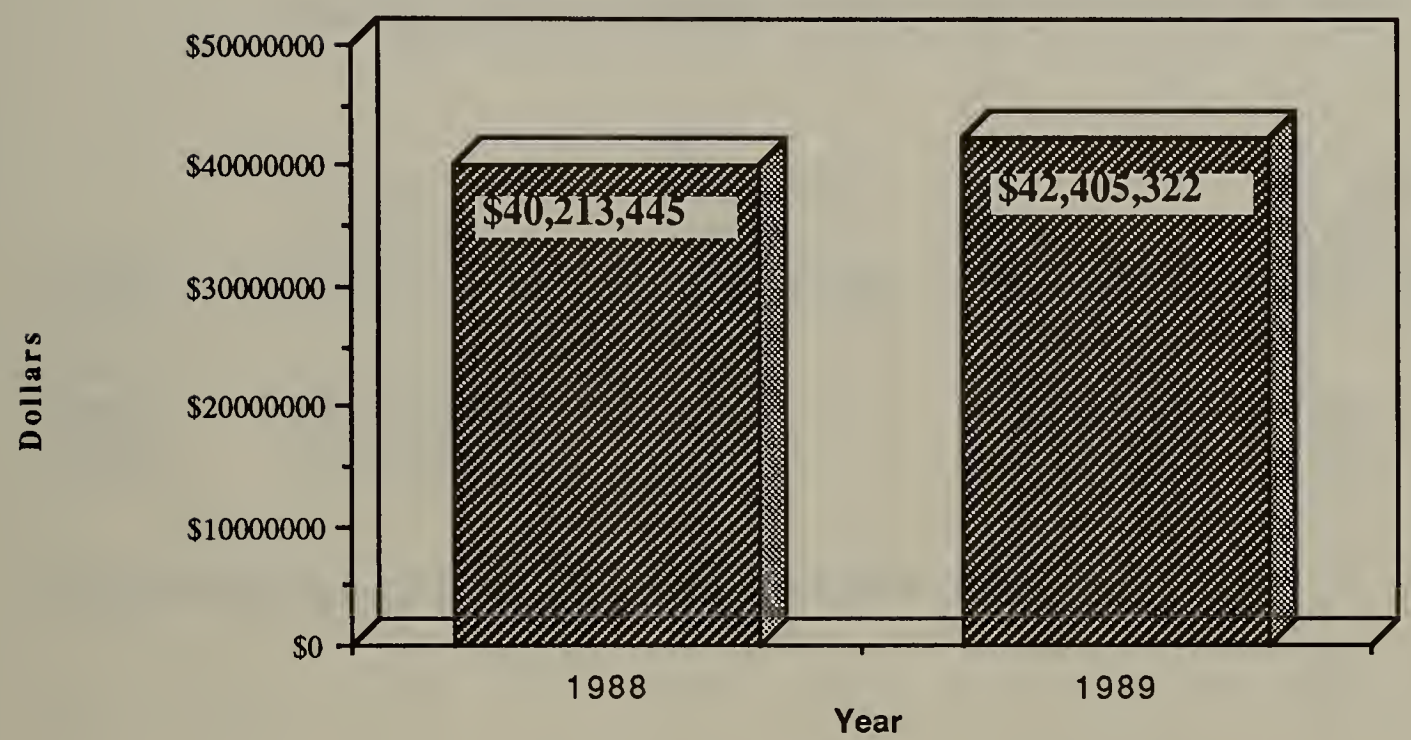
All of the components of analysis described in Section 2.0 have been incorporated into two spreadsheets: the first is an analysis for the first half of calendar 1989; the second consists of the same for the second half of 1989. These two exhibits and an over-all summary appear on the following pages. The estimated overall economic impact of the Hynes on the Commonwealth during Quarters 1 and 2 of 1989, given the approach described herein, was $353,733,630. Estimated total taxes generated by the Hynes for this period were $24,680,698.

The estimated overall economic impact of the Hynes on the Commonwealth during Quarters 3 and 4 of 1989, was $254,036,401 for an estimated total tax benefit of $17,724,624. Therefore, the total economic impact of the Hynes during 1989 was $607,770,031 for a total tax benefit of $42,405,322.

PERIOD	TOTAL ESTIMATED ECONOMIC IMPACT*	TOTAL ESTIMATED TAXES GENERATED
Q1 + Q2	$353,733,630	$24,680,698
Q3 + Q4	$254,036,401	$17,724,624
TOTAL 1989	$607,770,031	$42,405,322

* Total economic impact includes a multiplier of 2.07 established by the U.S Department of Commerce, Bureau of Economic Analysis.

ESTIMATED TAX DOLLARS GENERATED BY THE HYNES



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* Using the RIMSII Multiplier
U.S. Department of Commerce

4.0 Projected 1990 Impact

Having estimated the impact of the Hynes on the Commonwealth during 1988 and 1989, it is then possible to project the impact of the facility on the Commonwealth during 1990. The simplest method is to use the percentage increase from 1988 to 1989 for Total Economic Impact (4.0%) and for Total Tax Revenue generated (5.5%). A chart below depicts the resultant impact.

PROJECTED ECONOMIC IMPACT OF THE HYNES - 1990

YEAR	TOTAL ECONOMIC IMPACT	% INCREASE OVER PREV YEAR	TOTAL TAX IMPACT	% INCREASE OVER PREV YEAR
1988	$584,383,225	--	$40,213,445	--
1989	$607,770,031	4%	$42,405,322	5.5%
1990*	$632,080,832	4%	$44,737,614	5.5%

*Projected based upon the history between 1988 - 1989.

HYNES ECONOMIC IMPACT (OF JAN - JUN 1989 HYNES ACTIVITY) STUDY
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(Assessment - Bell Associates Inc.)
March 8, 1990

BOSTON DELEGATE
EXPENDITURES

U.S.DELEGATE EXPENDITURES (Source:IACVB) 1986 DATA	Percentage	1988 DATA	Percentage			1989 DATA			
					Hotel for 4.1 nights=	$118.31 / $485.07	TIMES (X) NUMBER OF HYNES VISITORS*		
							179701	% TAX**	ACTUAL TAX
$243.12	50.9%	$264.56	51.0%	Hotel Room and Incidentals	0.51	$485.07	$87,167,744	9.7%	$8,455,271
$46.75	9.8%	$56.87	11.0%	Hotel Restaurants	0.11	$104.27	$18,737,638	5.0%	$936,882
$64.95	13.6%	$59.08	11.4%	Other Restaurants	0.11	$108.32	$19,465,793	5.0%	$973,290
$19.13	4.0%	$26.86	5.2%	Hospitality Suites	0.05	$49.25	$8,849,885	9.7%	$858,439
$24.04	5.0%	$25.95	5.0%	Entertainment	0.05	$47.58	$8,550,057		
$36.69	7.7%	$42.44	8.2%	Retail Stores	0.08	$77.81	$13,983,214	5.0%	$699,161
$25.61	5.4%	$22.39	4.3%	Local Transportation	0.04	$41.05	$7,377,101		
$17.20	3.6%	$20.50	4.0%	Other	0.04	$37.59	$6,754,380		
$477.49	100.0%	$518.65	100.0%	TOTAL	1.00	$950.95	$170,885,812		$11,923,042
							X		X
						Multiplier >	2.07		2.07
						TOTAL IMPACT	$353,733,630		$24,680,698

* Includes visitors to Conventions without exhibits, Conventions with exhibits, Trade shows and other unique shows deemed to have a notable impact on the hotel and other relevant industries. Public or other "gate" type events are not included.

** This is comprised of 5.7% state tax and 4% local tax

Source for the average hotel room rate is an average developed from a survey of 11 groups representing 15018 rooms booked JAN - JUN 1989 in hotels within a $10 taxi ride from the Hynes.

Source for the 4.1 nights average stay of convention delegates and proportional spending is the IACVB.

HYNES ECONOMIC IMPACT (OF JUL - DEC 1989 HYNES ACTIVITY) STUDY
****
(Assessment - Bell Associates Inc.)
March 8, 1990

BOSTON DELEGATE
EXPENDITURES

U.S.DELEGATE EXPENDITURES (Source:IACVB)					Hotel for 4.1 nights=	$124.78 / $511.60	TIMES (X) NUMBER OF HYNES VISITORS*		
1986 DATA	Percen-tage	1988 DATA	Percen-tage			1989 DATA	122362	% TAX**	ACTUAL TAX
$243.12	50.9%	$264.56	51.0%	Hotel Room and Incidentals	0.51	$511.60	$62,600,154	9.7%	$6,072,215
$46.75	9.8%	$56.87	11.0%	Hotel Restaurants	0.11	$109.97	$13,456,572	5.0%	$672,829
$64.95	13.6%	$59.08	11.4%	Other Restaurants	0.11	$114.25	$13,979,502	5.0%	$698,975
$19.13	4.0%	$26.86	5.2%	Hospitality Suites	0.05	$51.94	$6,355,610	9.7%	$616,494
$24.04	5.0%	$25.95	5.0%	Entertainment	0.05	$50.18	$6,140,286		
$36.69	7.7%	$42.44	8.2%	Retail Stores	0.08	$82.07	$10,042,148	5.0%	$502,107
$25.61	5.4%	$22.39	4.3%	Local Transportation	0.04	$43.30	$5,297,919		
$17.20	3.6%	$20.50	4.0%	Other	0.04	$39.64	$4,850,707		
$477.49	100.0%	$518.65	100.0%	TOTAL	1.00	$1,002.95	$122,722,899		$8,562,620
							X		X
						Multiplier >	2.07		2.07
						TOTAL IMPACT	$254,036,401		$17,724,624

* Includes visitors to Conventions without exhibits, Conventions with exhibits, Trade shows and other unique shows deemed to have a notable impact on the hotel and other relevant industries. Public or other "gate" type events are not included.

** This is comprised of 5.7% state tax and 4% local tax

Source for the average hotel room rate is an average developed from a survey of 21 groups representing 15412 rooms booked Jul - Dec 1989 in hotels within a $10 taxi ride from the Hynes.

Source for the 4.1 nights average stay of convention delegates and proportional spending is the IACVB.